
*
* TECHNICAL REPORT ON *
* DEVELOPMENT OF NALLIAH MAR AREA *
* FROM ANDH MASJID KHANYAR TO *
* NOORBAGH WANIYAR . *
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Srinagar Development Authority
Sewerage and Drainage Division Srinagar

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Part (A)- Housing and Urban Development Part of the Project
Part (B)- Sewerage and Sanitation part of the Project.

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INTEGRATED PROJECT REPORT FOR THE DEVELOPMENT OF
NALLAH MAR AREA

1. The waterways of Srinagar - once famed for their splendour and beauty which prompted travellers and visitors to the City to bestow upon it the title of "Venice of the East" - have become the principal cross that the present day planners have to bear. Amongst the problems that confront & impede the progress and development of the City, the pride of place surely goes to the Nallah Mar - originally designed as an artery of communication between the Dal Lake and River Jhelum but now a festering open drain - traversing as it does, the most congested and densely populated parts of the City.
2. The Nallah was constructed by the legendary Badshah (Sultan Zain-ul-Abdin) the leitmotif of whose reign was an upsurge in welfare works, on the approximate pattern of the Venetian Grand Canal. It derived its flow from the Dal Lake and not only linked up the lake with the River but also irrigated sizeable tracts of agricultural land and its terminus. As the City expanded and grew, the resultant shift in the centers of activity led to the diminution in the importance of the navigation function of the channel, process which was accentuated by the introduction and fast pace of development of motorised transport. The more urgent problem of flood control dominated the stage in the forties and fifties and measures, which deprived the Nallah of its water were implemented. The deterioration that set in finally concluded in disuse and the Nallah offered itself as the most convenient place for the dumping of garbage, disposal of raw sewage and sullage and encroachment to the habitation on either side, which like the rest of the City has no public sewerage and sewage disposal system. The ultimate result was the creation of a health hazard of formidable proportions in the shape of an open repository of filth, offensive odours and pollution of every kind imaginable.

3. Attempts were made in the past to desilt and clear the channel, even to flush it by pumping but suffered from inadequacy and desultoriness but it was only in the last year of the sixties that serious thought began to be devoted to the problem in an integrated, overall perspective. A programme of detailed technical studies, ground surveys and planning priorities was initiated culminating in the scheme presented with this Report.

4. Reactivation of the Nallah and its restoration to its original position as a Navigation and Irrigation Channel have been considered and found to be hydraulically and economically infeasible, the options available narrowed down to:-

- (a) Conversion of the Nallah into a Storm Water Drain by large scale pumping at its off-take.
- (b) Filling up of the Nallah to convert it into an avenue with sewer underneath.

The annual recurring costs, past experience and the ~~most~~ petrified state of the sludge existent in the Nallah ~~worked~~ decisively against the adoption of the first ~~xxxx~~ alternative. Conferences, meetings and consultations, in which technical experts no longer in active service participated yielded unanimous support to the implementation of the second proposal i.e. the utilization of the Nallah as a trunk sewer overlaid by a Road.

5. As is the wont with such projects, the establishment of the cardinal frame of reference catalysed thinking on a wider plane and in an enlarged dimension. The re-developmental possibilities of the areas on either side of the Nallah could at once be visualized. Apart from beautification, ease of circulation in communication and regulation and zoning in consonance with principles of Urban Planning, it became increasingly clear that the dovetailing of the scheme for elimination of the health hazards and that for re-construction would go a long way towards making the ~~entire proposition~~ entire proposition financially remunerative.

6. before the essential features of the Project, that has assumed shape after intensive investigations on the lines adumbrated above, are delineated, it would be worthwhile to dwell briefly on the advice tendered by Shri A.K.Roy, Public Health Engineering Adviser to the Government of India (Ministry of Health) who paid us a visit on our invitation in September, 1970. He shared our views that the best solution for the situation is an integrated scheme of sanitation and urban re-development, even though it would entail a problem of a sizeable magnitude in respect of resettlement and rehabilitation. He also advised segregation of the Storm Water and Sewage conveyance systems and the installation of a cheaper Treatment Plant than originally envisaged. The suggestions made by Mr. A.K.Roy, have been accepted in full and in fact the final designs have been prepared in consultation with his organisation.

7. In its essentials, the Scheme proposed now comprises:-
(a)-Construction of a 13000 feet trunk sewer of Precast Cement concrete pipes from Andh Masjid to Guzerbal, catering to a population of about one lac and eighty thousand (inclusive of probable increments for the next thirty years). The part of the City which this population inhabits is bounded by Dal Lake, Tsunti Khul, River Jhelum and Anchar Lake in the East, South, West and North respectively and constitutes a distinct independent Zone for sewerage and ~~xxxxx~~ sewage disposal. The present proposal would not, therefore, conflict or interfere with the schemes for the sewerage and sewage disposal of the City as a whole. In fact the sewer would be an unalienable part of the overall scheme.
(b)- A system of branch sewers to be initially laid in streets and roads presently having adequate widths to permit such installation and ultimately in others as they are improved under the Master Plan.

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(c) Filling up of the Nallah with earth to be obtained from Flood Spill Channel upto Road formation level (ranging from 5' - 15 ft.).

(d)-Construction of a 3.75 K.M. long road over the filling with an overall width of 64', comprising dual carriage way (22' each) divided by a central strip 4' in width (underneath which the sewer shall be aligned) and flanked by sidewalks of 8' width on either side. (See layout)

(e)-Provision of pipe drains with manholes on either side of the road for disposal of storm water.

(f)-Acquisition of 56' wide additional strip of land along the road for construction of shops and residential flats.

(g)-Construction of :-

- 1)-~~Area of road~~ shop-cum-flat blocks ~~100' x 100'~~ ~~100'~~
~~100' x 100'~~ road 15' wide at the rear.
- ii)-Eighty No. shops in two markets situated at traditionally commercial locations.
- iii)-Two Super Bazaars in close vicinity to the markets at (ii) above.

The Total No: of shops shall be about 1335.

The residential flats shall be of three categories:-

- (1)-Single room flats with Kitchen and bathroom.
- (2)-2 Room flats with Kitchen and bath room.
- (3)- 3 Room flats with Kitchen and bath room.

8. The present width of the Nallah ranges from 33' to 40' only and in the enlargement to 120' necessitated by the above proposals, acquisition of 400 houses and about 70 acres of land is involved. Socio-Economic surveys conducted in the area reveal that the number of families so dislocated would be about 650 Nos. (inclusive of approach roads) slightly more than fifty percent of which are primarily small businessmen and people belonging to the professions. The rest are almost equally divided between cottage industry workers and unskilled labour. On the assumption that about 15% of the dispossessed shall be able to make their own arrangements after payment of compensation to them, an assumption well grounded in the conclusion drawn

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derived from the assessment of the general economic conditions in the area, it is estimated that 650 plots shall be required for the rehabilitation of the people. These are available in the Housing Colonies at Bota-Kadal, Soura and Natipora. Depressed sections of the community such as Carpet weavers and others of this type are proposed to be resettled on Government owned land in the proximity of the Nallah. Shop keepers not residing in the area but having their sole places of business there shall, of course, be accorded preferential treatment in the allotment of new shops, if and when dislodged. ✕

9. The total investment on the entire scheme is estimated to be Rs. 516.10 lacs as under:-

i)-Acquisition of land and property	= Rs. 97.53 lacs
ii)-Construction of sewer storm water drain and ancillary works.	= Rs. 130.36 "
iii)-Construction of Road including filling of Nallah.	= Rs. 19.64 "
iv)- Construction of shops-cum-flats with service roads at rear.	= Rs. 269.57 "
Total	= Rs. 516.10 "

10. The construction of the Road including filling of Nallah is proposed to be financed by the State Government to the extent of Rs. 184.00 lacs. That would leave funds to the tune of Rs. 332.10 lacs to be obtained from institutional sources.

11. The execution of the Project has been envisaged to be phased over a period of four years in consideration of the anticipated availability of materials, working conditions, organisational capacity of the Department concerned and the time consumed in procedures for acquisition. The financial as well as the physical phasing over this period is indicated in the separate annexure.

12. The returns from the investment shall primarily comprise of premia on lease of commercial sites and rents of shops and residential flats. With these parameters

calculated at reasonable levels, arrived at after careful thought and scrutiny, the yearly net income, ~~xxxxxxxxxx~~ accounting for payment of interest on capital as well as repairs and maintenance of assets is expected to be Rs. _____ lacs from 5th year onwards.

13. The Project, being financially a sound proposition and otherwise essential from the point of view of Environmental Sanitation and Public Health is eminently suited for immediate ~~✓~~ implementation.

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GENERAL ABSTRACT OF TOTAL INVESTMENT OF
WAR AREA DEVELOPMENT SCHEME FROM KHANYAR
TO PRESTRESSED CONCRETE BRIDGE.

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(Appendix (A)).

S.No:	Particulars.	Amount.
1.	Acquisition of 70 acres of land and 390 houses.	97.53 lacs.
2.	Construction of Sewer, Storm water drains and ancillary works.	130.36 lacs.
3.	Construction of road road including filling of nallah.	19.64 lacs.
4.	Construction of shops-cum-flats and other commercial building including service roads at rear.	268.57 lacs
Total investment.		516.10 lacs

Note:-

Construction of road including Laying of Trunk Sewer and other allied structures (inclusive of part compensation) involving cost of Rs. 184.00 lacs would be born by the State Government and the rest amount shall be raised as loan from HUDCO.

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